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(54) JAMB, PARTICULARLY FOR SELF-STORING DOOR

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This invention relates to window structures wherein one or more sashes are supported in a frame. More particularly, it relates to jambs for such window structures, especially to self-storing storm doors, including such window structures.

Window structures are now known in which a combined sash guide and weatherstrip element is arranged between one side of the window frame and the adjacent side of the sash for yieldably urging the sash in a direction toward the opposite side of the frame, not only to provide a weatherseal, but also to enable the lateral shifting movement of the sash required to remove the sash from the window frame when desired. Many of such combined sash guides and weatherstrips were particularly designed to be secured to the parting stop ordinarily provided on the frame of double hung windows. These particular combined sash guides and weatherstrips were provided with flexible wing parts extending from the parting stop to each of the inner and outer stops of the double hung window. In some cases, the combined sash guides and weatherstrips were provided with a parting stop. The flexible wing was sometimes provides with a portion to provide a rolling engagement with the inner faces of the inner and/or outer stops of the double hung windows.

In other windows of this type, the sash abutted channels which were spaced from the frame jamb, with coil springs disposed in the space to urge the channels against the sash. Some such windows were provided with means for stopping the outward movement of the channels so that the channels will remain in place in the window frame when the sash is removed. Such means sometimes were wells formed in the channels and through the bottom wall of which extended a conical screw, with the coil spring concentrically mounted over the well.

Another such type of window included a flat bow spring member, having its remote ends hooked to and engaged with the frame jamb, with the sash resiliently held in the frame by the force of the bow spring.

A still further type of such window structure provided a fairly thick sponge member between the frame jamb and the channel resiliently to urge the channel against the sash.

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While all such window structures were mainly satisfactory, certain deficiencies are apparent. The combined sash guide and weatherstrip suffers the deficiency that the sash must be accurately positioned against the flexible wings themselves, with no intermediate guiding member provided. The coil spring or flat bow spring types each suffers from the deficiency that the pressure against the sash is non-uniform. The sponge member suffers from the deficiency that the sponge becomes almost non-resilient at exceedingly low temperatures.

An object, therefore, of one aspect of this invention is the provision of a window frame in which the jamb portion is adapted to be uniformly resiliently urged into contact with a window sash.

An object of another aspect of the invention is the provision of a window frame in which a resilient member is integrally formed on a component of the jamb portion whereby uniformly resiliently to urge the jamb into contact with a window sash.

An object of another aspect of this invention is to provide such a window frame jamb formed of two mating extruded components, and to provide such two novel mating extruded components.

An object of yet another aspect of this invention is to provide a storm door provided with such novel window frame structure.

By one aspect of this invention, then, a primary component is provided for a window frame, the component comprising: an extruded self-sustaining member, preferably extruded from an elastic, synthetic plastic material, for example a vinyl plastic, and including: a transverse longitudinally extending web portion, preferably of arcuate form: a pair of transversely spaced apart, longitudinally extending ribs upstanding therefrom, preferably from the convex face of the arcuate form; a longitudinally extending flange on each of the ribs, the flanges being directed towards one another; optionally and preferably a downwardly projecting, longitudinally extending lip depending from each of the flanges; and optionally and preferably a pair of marginal, longitudinally extending gripping ribs, upstanding from the concave face of the arcuate form. If desired, a longitudinally extending, elastic wing may be integrally associated with the primary component, the wing being disposed on the face of the web between the pair of transversely spaced apart longitudinally extending ribs.

By yet another aspect of this invention, a two piece jamb for a window frame is provided, the two piece jamb comprising: (A) a primary component comprising: an extruded self-sustaining member, preferably extruded from an elastic, synthetic plastic material, for example a vinyl plastic, and including: a transverse longitudinally extending web portion, preferably of arcuate form; a pair of transversely spaced apart, longitudinally extending ribs upstanding therefrom, preferably from the convex face of the arcuate form; a longitudinally extending flange on each of the ribs, the flanges being directed towards one another; optionally and preferably a downwardly projecting, longitudinally extending lip depending from each of the flanges; and optionally and preferably a pair of marginal, longitudinally extending gripping ribs, upstanding from the concave face of the arcuate form; (B) a secondary component comprising: an extruded, self-sustaining member, preferably extruded from an elastic, synthetic plastic material, for example, a vinyl plastic, and including: a transverse, longitudinally extending web, preferably flat; optionally and preferably, a pair of marginal, longitudinally extending ribs projecting from one selected face of the web; optionally and preferably a median longitudinally extending parting stop projecting from the selected face of the web, the parting stop most preferably being of "T"-shaped cross-section with the leg of the "T" extending from the web; and (C) one longitudinally extending elastic wing integrally associated with either the primary component or the secondary component for disposition between the webs of the primary and secondary components, and preferably two marginal such wings, integrally associated with the secondary component, the wing being disposed on the opposite face of the web; whereby, on assembly, the flanges on the primary component engage the selected face of the web of the secondary component, preferably with

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the marginal ribs on the selected face of the web of the secondary component slidably engaging and being guided by the downwardly extending ribs on the flanges on the web of the primary member, so that the primary component and the secondary component are resiliently held together by the action of the wing.

By still a further aspect of this invention, a storm door, preferably formed of wood, is provided, the storm door including a window aperture therein, the door including: a window frame in said window aperture, the window frame comprising: an upper plate and a lower sill, each such component being an extruded self-sustaining member, preferably extruded from an elastic, synthetic, plastic material, for example, a vinyl plastic, and including a transverse, longitudinally extending web portion, preferably of arcuate form; and a pair of marginal, longitudinally extending gripping ribs upstanding from the concave face of the arcuate form, the ribs preferably being directed inwardly to face one another, the plate and the sill each being disposed in the window frame with the marginal edges of the marginal gripping ribs engaging the inside and outside faces of the door; and a pair of mutually opposed, two piece jambs, each jamb comprising: (A) a primary component comprising: an extruded self-sustaining member, preferably extruded from an elastic, synthetic plastic material, for example, a vinyl plastic, and including: a transverse longitudinally extending web portion, preferably of arcuate form; a pair of transversely spaced apart, longitudinally extending ribs upstanding therefrom, preferably from the convex face of the arcuate form; a longitudinally extending flange on each of the ribs, the flanges being directed towards one another; optionally and preferably a downwardly projecting longitudinally extending lip depending from each of the flanges; and optionally and preferably a pair of marginal, longitudinally extending gripping ribs, upstanding from the concave face of the arcuate form; (B) a secondary component comprising: an extruded, self-sustaining member, preferably extruded from an elastic, synthetic plastic material, for example, a vinyl plastic, and including: a transverse, longitudinally extending web, preferably flat; optionally and preferably, a pair of marginal, longitudinally extending ribs projecting from one selected face of the web; optionally and preferably a median longitudinally extending parting stop projecting from the selected face of the web, the parting stop most preferably being of "T"-shaped cross-section with the leg of the "T" extending from the web; and (C) one longitudinally extending wing integrally associated with either the primary component or the secondary component for disposition between the webs of the primary and secondary components, and preferably two marginal such wings, integrally associated with the secondary component, the wing being disposed on the opposite face of the web; whereby, on assembly, the flanges on the primary component engage the selected face of the web of the secondary component, preferably with the marginal ribs on the selected face of the web of the secondary component slidably engaging and being guided by the downwardly extending ribs on the flanges on the web of the primary member, so that the primary component and the secondary component are resiliently held together by the action of the wing; the jambs being disposed in the window frame with the marginal edges of the marginal gripping ribs engaging the inside and outside faces of the door.

In the accompanying drawings:

Figure 1 is a perspective view of a storm door according to one aspect of this invention;

Figure 2 is a section along the line II-II of Figure 1;

Figure 3 is an isometric view of a portion of the frame jamb of another aspect of this invention showing the primary and secondary components used therein;

Figure 4 is a section through a door, frame jamb and window sash of a variant of this invention; and

Figure 5 is a section through a door, frame jamb and window sash of another variant of this invention.

Turning firstly to Figure 1, the storm door, shown generally as reference numeral 10, is provided with a window 11 set into a window aperture 12. The window aperture is fitted with a window frame comprising an upper plate 13, a lower sill 14, and a pair of parallel jambs 15. The window 11 includes a sash 16 extending around the perimeter of the glass, and the sash 16 is adapted to be removably secured within the window frame. The sash 16 is formed from sashing material disclosed and claimed in Canadian Patent No. 724,933 issued January 4, 1966 to Douglas H. Mitten. However, any conventional sashing material, and any conventional glazing means may be used.

As seen in Figures 2 and 3, the frame jamb 15 includes a primary component 20 and a secondary component 30. Primary component 20 includes a transverse, longitudinally extending rib 21, provided with a pair of transversely spaced apart, longitudinally extending upstanding ribs, namely, an inner rib 22 and an outer rib 23. Outer rib 23 is preferably formed longer than inner rib 22 to provide greater security when the sash 16 is disposed thereagainst. Extending inwardly from the top edge of rib 22 is an inner, longitudinally extending flange 24, and also extending inwardly toward flange 24 is an outer, longitudinally extending flange 25. Depending downwardly towards web 21 from flange 24 is an inner, longitudinally extending lip 26, and, also depending downwardly towards web 21 is an outer, longitudinally extending lip 27. The lower edge of lips 26 and 27 are spaced approximately the same distance from web 21. The web 21 is also provided with a pair of longitudinally extending marginal gripping ribs 28, the angle subtended between the ribs 28 and the web 21 being less than 90°. In this way, the marginal edges 29 of the gripping ribs 28 provide a tight resiliently urged contact with the inner face 17 and the outer face 18 of the door 10.

The secondary component 30 includes a transverse, longitudinally extending web 31 terminating at each of its marginal edges with a protruding longitudinally extending bead or rib, namely, inner marginal rib 32 and outer marginal rib 33. The web also includes, depending at the marginal edges from a face opposite to ribs 32 and 33, longitudinally extending legs, namely, inner leg 34 and outer leg 35. Inner leg 34 terminates in a longitudinally extending, inwardly facing flexible wing 36. Outer leg 35 terminates in a longitudinally extending inwardly facing flexible wing 37. The web 31 also includes a median longitudinally extending parting stop 36, of "T"-shaped cross-section, with the leg of the "T" extending from the same face of the web as do ribs 32 and 33.

Thus, when the frame jamb is assembled, the resiliency of the wings 36, 37 contacting the face of web 31 causes the outer face of web 31 adjacent ribs 32, 33 to be urged against the edges of lips 26, 27. Pressure applied by the sash 16 against web 31 causes the resilient wings 36, 37 to be bent towards web 31, which permits sash 16 to be removed.

As seen in Figure 3, the web 21 is arcuate in form. The concave face 211 is provided with the ribs 22, 23, while the convex face 212 is provided with the marginal gripping ribs 28, 28.

Figure 4 shows an embodiment in which the flexible wings 36, 37 are integrally formed by means of legs 34, 35 respectively to face 212 of web 21. On the other hand, Figure 5 shows a single flexible wing 36 integrally secured to the inner face of web 31. It is understood that all variations of the positioning of one or more flexible wings between webs 21 and 31 by means of integral legs to either web 21 or web 31 is embraced by this invention.

The material out of which primary and secondary components 20 and 30 respectively are formed depends on the choice of the user. It is preferred that a resilient, heat-insulating, synthetic plastic material, for example, a vinyl plastic, such as polyvinyl chloride, or nylon, be used. However, component 20 may be extruded from aluminum and component 30 may be extruded from a vinyl plastic or nylon or steel, if the embodiments used in Figures 1 - 3 and 5 are used. For the embodiment of Figure 4, component 20 should be extruded from a resilient material, for example, a vinyl plastic or nylon or steel, and component 30 may be extruded from a non-resilient material, for example, aluminum.

SUPPLEMENTARY DISCLOSURE

The Principal Disclosure provided a two-component jamb structure for a window and more particularly both the primary component and the secondary component for such jamb structure. As taught in the Principal Disclosure, the secondary component provided for the window frame included: an extruded, self-sustaining member, for example, a vinyl plastic, and including: a transverse, longitudinally extending web, preferably flat; optionally and preferably, a pair of marginal, longitudinally extending ribs projecting from one selected face of the web; optionally and preferably a median longitudinally extending parting stop projecting from the selected face of the web, the parting stop most preferably being of "T"-shaped cross-section with the leg of the "T" extending from the web; and one longitudinally extending elastic wing, and preferably two marginal such wings, integrally associated with the secondary component, the wing being disposed on the opposite face of the web.

The Principal Disclosure taught a number of configurations for the longitudinally extending elastic wings. For example, as shown in Figures 2 and 3, the wings may be a pair of marginal wings, each extending laterally inwardly from a marginal edge of the web. Alternatively, as shown in Figure 5, a single wing may be provided, extending from an area of the web between the marginal edge and the median area.

By the present Supplementary Disclosure, a novel cross-sectional configuration of the wings is provided which imparts improved flexibility and sturdiness to the secondary component. The wings are integrally associated along a longitudinally extending zone of the web which zone is intermediate the longitudinally extending marginal side edges of the web, (and preferably is a median longitudinally extending zone of the web), and project outwardly from the web, and extend laterally outwardly towards the marginal edges of the web. One preferred configuration has a cross-section satisfying the equation $y = \sin x$ from $-\frac{\pi}{2}$ to $\frac{3\pi}{2}$.

Thus, by one aspect of the invention as provided by this Supplementary Disclosure, a two-piece jamb for a window frame is provided, the two-piece jamb comprising: (A) a primary component comprising: an extruded, self-sustaining member, (preferably extruded from an elastic, synthetic plastic material, for example, a vinyl plastic), and including: a transverse longitudinally extending web portion, (preferably of arcuate form); a pair of transversely spaced apart, longitudinally extending ribs upstanding therefrom, (preferably from the convex face of the arcuate form); a longitudinally extending flange on each of the ribs, the flanges being directed towards one another; optionally and preferably, a downwardly projecting, longitudinally extending lip depending from each of the flanges; and optionally and preferably, a pair of marginal, longitudinally extending gripping ribs, upstanding from the concave face of the arcuate form; (B) a secondary component comprising: an extruded, self-sustaining member, (preferably extruded from an elastic, synthetic plastic material, for example, a vinyl plastic), and including: a transverse, longitudinally extending web (preferably flat); optionally and preferably, a pair of marginal, longitudinally extending ribs projecting from one selected face of the web; optionally and preferably a median longitudinally extending parting stop projecting from the selected face of the web, the parting stop most preferably being of "T"-shaped cross-section with the leg of the "T" extending from the web; and (C) a pair of longitudinally extending elastic wings integrally associated with the secondary component for disposition between the webs of the primary and secondary components, such wings being integrally associated with the secondary component, the wings being disposed on the opposite face of the web, the wings being integrally associated along a longitudinally extending zone of the web intermediate the longitudinally extending marginal side edges of the web, (and preferably along a longitudinally extending median zone of the web), projecting outwardly therefrom and extending laterally outwardly towards the marginal edges of the web, (and preferably having a cross-section roughly conforming to a sine curve); whereby, on assembly, the flanges on the primary component engage the selected face of the web of the secondary component, (preferably with the marginal ribs on the selected face of the web of the secondary component slidably engaging and being guided by the downwardly extending ribs on the flanges on the web of the primary member), so that the primary component and the secondary component are resiliently held together by the action of the wings.

By a further aspect of this invention, a storm door, preferably formed of wood, is provided, the storm door including a window aperture therein, the door including: a window frame in said window aperture, the window frame comprising: an upper plate and a lower sill, each such component being an extruded self-sustaining member, preferably extruded from an elastic, synthetic, plastic material, for example, a vinyl plastic, and including a transverse, longitudinally extending web portion, preferably of arcuate form; and a pair of marginal, longitudinally extending gripping ribs upstanding from the concave face of the arcuate form, the ribs preferably being directed inwardly to face one another, the plate and the sill each being disposed in the window frame with the marginal edges of the marginal gripping ribs engaging the inside and outside faces of the door; and a pair of mutually opposed, two-piece jambs, each jamb comprising: (A) a primary component comprising: an extruded self-sustaining member, (preferably extruded from an elastic, synthetic plastic material, for example, a vinyl plastic), and including: a transverse longitudinally extending web portion, (preferably of arcuate form); a pair of transversely spaced apart, longitudinally extending ribs upstanding therefrom, (preferably from the convex face of the arcuate form); a longitudinally extending flange on each of the ribs, the flanges being directed towards one another; optionally and preferably a downwardly projecting longitudinally extending lip depending from each of the flanges; and optionally and preferably a pair of marginal, longitudinally extending gripping ribs, upstanding from the concave face of the arcuate form; (B) a secondary component comprising: an extruded, self-sustaining member, (preferably extruded from an elastic, synthetic plastic material, for example, a vinyl plastic), and including: a transverse, longitudinally extending web, (preferably flat); optionally and preferably, a pair of marginal, longitudinally extending ribs projecting from one selected face of the web; optionally and preferably a median longitudinally extending parting stop projecting from the selected face of the web, the parting stop most preferably being of "T"-shaped cross-section with the leg of the "T" extending from the web; and (C) a pair of longitudinally extending wings integrally associated with the secondary component for disposition between the webs of the primary and secondary components, such wings being integrally associated with the secondary component, the wings being disposed on the opposite face of the web, the wings being integrally associated along a longitudinally extending zone of the web intermediate the longitudinally extending marginal side edges of the web, (and preferably extending along a longitudinally extending median zone of the web), projecting outwardly therefrom and extending laterally outwardly towards the marginal edges of the web, (and preferably having a cross-section roughly conforming to a sine curve); whereby, on assembly, the flanges on the primary component engage the selected face of the web of the secondary component, (preferably with the marginal ribs on the selected face of the web of the secondary component slidably engaging and being guided by the downwardly extending ribs on the flanges on the web of the primary member), so that the primary component and the secondary component are resiliently held together by the action of the wings; the jambs being disposed in the window frame with the marginal edges of the marginal gripping ribs engaging the inside and outside faces of the door.

In the accompanying drawings forming part of this Supplementary Disclosure,

Figure 6 is a section through a door frame jamb and window sash of the embodiment of the invention of the present Supplementary Disclosure; and

Figure 7 is an isometric view of a portion of the primary and secondary components shown in Figure 6.

Turning to Figures 6 and 7, the primary component 20 and the exposed face portion of the secondary component 30, as well as their cooperation with the storm door 10, have already been described, insofar as the identical reference numerals are used, in the description of Figures 2 and 3 in the Principal Disclosure. The flexible wings in the embodiment shown in Figures 6 and 7 are integrally associated with a longitudinally extending median area 640. Wing 636 extends towards web face 21 of primary component 20, and also laterally outwardly towards marginal rib 22. Similarly, wing 637 extends towards web face 21 of primary component 20 and also laterally outwardly towards marginal rib 23. Wing 636 resiliently engages web face 21 at longitudinally extending palm 638, while wing 639 resiliently engages web face 22 at longitudinally extending palm 638.

While the cross-section of wings 636 and 638 roughly resembles a sine curve, i.e., satisfies the equation $y = \sin x$ from $-\frac{\pi}{2}$ to $\frac{3\pi}{2}$ it is to be understood that any cross-sectional configuration is intended as long as the two wings are integrally associated along a longitudinally extending zone of the web intermediate the longitudinally extending marginal side edges of the web (and preferably along a longitudinally extending median zone of the web), and project outwardly from the web and also extend laterally outwardly towards the marginal edges of the web.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A primary component for a window frame, the component being an extruded, self-sustaining member, and comprising:

(a) a transverse, longitudinally extending web portion;

(b) a pair of transversely spaced-apart, longitudinally extending ribs upstanding from one face thereof;

(c) a longitudinally extending flange on each of the ribs (b), the flanges being directed towards one another, and spaced from one another, said flanges providing a restraining surface for a secondary component for a window frame which is disposed between said flanges and said web portion, and resiliently urged away from said web portion;

and (d) means for securing the primary component to a post structure, said means comprising a pair of marginal, longitudinally extending gripping ribs, upstanding from the other face of the web portion (a).

2. The component of claim 1 wherein each of said gripping ribs subtends an angle of less than 90° to the web portion (a).

3. The component of claim 1 wherein said web portion (a) is arcuate in form, and wherein said ribs (b) extend from the convex face of said web portion (a).

4. The component of claim 3 wherein said web portion (a) is arcuate in form and wherein said gripping ribs extend from the concave face of said web portion (a).

5. The component of claim 1 including:

(e) a downwardly projecting, longitudinally extending lip depending from each of said flanges (c).

6. The component of claim 1 wherein said ribs (b) are of unequal height.

7. The component of claim 1 including an integral flexible wing extending from the one face of the web portion (a).

8. The component of claim 1 extruded from an elastic, heat-insulating synthetic plastic material.

9. The component of claim 8 extruded from a relatively rigid vinyl plastic.

10. A primary component for a window frame, the component being an extruded relatively rigid vinyl plastic member, and comprising:

(A) a transverse, longitudinally extending arcuate web portion;

(B) a pair of transversely spaced-apart longitudinally extending ribs, upstanding from the convex face of said web portion (A), each rib being spaced inwardly from the marginal edges of said web portion (A), said ribs being of unequal height;

(C) a longitudinally extending flange on each of said ribs (B), said flanges being directed towards one another but being spaced from one another, said flanges providing a restraining surface for a secondary component for a window frame which is disposed between said flanges and said web portion (A), and resiliently urged away from said web portion (A);

(D) a downwardly projecting, longitudinally extending lip depending from each of said flanges (C), said lips terminating a predetermined spaced distance from the convex face of said web portion (A), to provide a channel between said rib (a) and said lip;

and (E) a pair of marginal, longitudinally extending, gripping ribs, upstanding from the concave face of said web portion (A), each of said gripping ribs subtending an angle of less than 90° to said web portion (A).

11. A two-piece jamb for a window frame, said two-piece jamb comprising:

(I) a primary component, said primary component being an extruded, self-sustaining member, and comprising:

(a) a transverse, longitudinally extending web portion;

(b) a pair of transversely spaced-apart, longitudinaly extending ribs upstanding from one face thereof, said ribs being spaced from the marginal edges of said web portion (a);

(c) a longitudinally extending flange on each of said ribs (b), said flanges being directed towards one another, and being spaced from one another, said flanges providing a restraining surface for a secondary component for a window frame which is disposed between said flanges and said web portion (a), and resiliently urged away from said web portion (a); and

(d) means for securing said primary component to a post structure, said means comprising a pair of marginal, longitudinally extending gripping ribs, upstanding from the other face of the web portion (a);

(II) a secondary component, said secondary component being an extruded self-sustaining member and including a transverse, longitudinally extending web (m);

(III) a longitudinally extending elastic wing member, integrally formed with either said web portion (a) of the primary component (I) or said web (m) of the secondary component (II) for disposition between said webs of said primary and said secondary components;

whereby, on assembly, said flanges (c) on said primary component (I) engage said selected face of said web (m) of said secondary component (II), so that said primary component (I) and said secondary component (II) are resiliently held together by the action of said wing (III).

12. The two-piece jamb of claim 11 wherein said wing member (III) is integrally formed on said web (m) of said secondary component.

13. The two-piece jamb of claim 12 wherein two wings (n) are provided, each extending from a marginal longitudinal edge of said web (m) of said secondary component.

14. The two-piece jamb of claim 11 wherein said pair of marginal, longitudinally extending, gripping ribs (I)(d) each subtends an angle of less than 90° to the web.

15. The two-piece jamb of claim 11 including:

(e) a downwardly projecting, longitudinally extending lip depending from each of said flanges (I)(c) of said primary component (I).

16. The two-piece jamb of claim 12 including:

(o) a pair of marginal, longitudinally extending ribs projecting upwardly from the opposite face of said web (m) of said secondary component (II).

17. The two-piece jamb of claim 12 including:

(p) a median, longitudinally extending parting stop projecting from the opposite face of said web (m) of said secondary component (II).

18. The two-piece jamb of claim 11 in which the primary component (I) is an extruded, relatively rigid, vinyl plastic member, and comprising:

(A) a transverse, longitudinally extending arcuate web portion;

(B) a pair of transversely spaced-apart, longitudinally extending ribs, upstanding from the convex face of said web portion (A), each rib being spaced inwardly from the marginal edges of said web portion (A), the ribs being of unequal height;

(C) a longitudinally extending flange on each of said ribs, said flanges being directed towards one another but being spaced from one another, said flanges providing a restraining surface for a secondary component for a window frame which is disposed between said flanges and said web portion, and resiliently urged away from said web portion;

(D) a downwardly projecting, longitudinally extending lip depending from each of said flanges (C), said lips terminating a predetermined spaced distance from the convex face of said web portion (A), to provide a channel between said rib (B) and said lip;

and (B) a pair of marginal, longitudinally extending gripping ribs, upstanding from the concave face of said web portion (A), each of said gripping ribs subtending an angle of less than 90° to said web portion (A).

19. The two-piece jamb of claims 11 or 18 in which said secondary component (II) is an extruded, relatively rigid, vinyl plastic member and comprises:

(M) a transverse, longitudinally extending, continuous, flat, plate-like web;

(N) a pair of marginal, longitudinally extending, integral, elastic wings projecting from one face of said web (M), and extending towards one another but spaced apart;

(O) a pair of marginal, longitudinally extending ribs projecting upwardly from the opposite face of said web (M):

and (P) a median, longitudinally extending, parting strip of "T"-shaped cross-section projecting from the opposite face of said web (M), with the leg of the "T" extending from said web (M).

20. A storm door including a window aperture therein, the door including: a window frame in said window aperture, the window frame comprising: an upper plate and a lower sill, each said plate and sill being an extruded self-sustaining member, and including a transverse, longitudinally extending arcuately formed web portion; and a pair of marginal, longitudinally extending gripping ribs upstanding from the concave face of the arcuately formed web portion, said plate and said sill each being disposed in said window aperture with the marginal edges of said marginal, longitudinally extending gripping ribs engaging the inside and outside faces of said door; and a pair of mutually opposed, two-piece jambs, each jamb comprising: (1) a primary component

comprising: an extruded self-sustaining member, and including: a transverse longitudinally extending web portion, a pair of transversely spaced-apart, longitudinally extending ribs upstanding therefrom; a longitudinally extending flange on each of said ribs, said flanges being directed towards one another; and means for securing the primary component within the window aperture and comprising a pair of marginal, longitudinally extending gripping ribs, upstanding from the other face of the web portion (a); (II) a secondary component comprising: an extruded, self-sustaining member, and including: a transverse, longitudinally extending web (m); and (III) one longitudinally extending wing integrally associated with either said primary component or said secondary component for disposition between said webs of said primary and said secondary components, said wing being disposed on the opposite face of said web; whereby, on assembly, said flanges on said primary component engage the selected face of said web of said secondary component, so that said primary component and said secondary component are resiliently held together by the action of said wing; said jambs being disposed in said window aperture with the marginal edges of said marginal gripping ribs engaging the inside and outside faces of said door.

21. The storm door of claim 20 in which said primary component (I) is an extruded, relatively rigid, vinyl plastic member, and comprising:

(A) a transverse, longitudinally extending arcuate web portion;

(B) a pair of transversely spaced-apart, longitudinally extending ribs, upstanding from the convex face of said web portion (A), each said rib being spaced inwardly from the marginal edges of said web portion (A), said ribs being of unequal height;

(C) a longitudinally extending flange on each of said ribs, said flanges being directed towards one another but being spaced from one another, said flanges providing a restraining surface for a secondary component for a window frame which is disposed between said flanges and said web portion, and resiliently urged away from said web portion;

(D) a downwardly projecting, longitudinally extending lip depending from each of said flanges (C), said lips terminating a predetermined spaced distance from the convex face of said web portion (A), to provide a channel between said ribs (B) and said lip;

and (E) a pair of marginal, longitudinally extending, gripping ribs, upstanding from the concave face of said web portion (A), each of said gripping ribs subtending an angle of less than 90° to said web portion (A).

22. The storm door of claims 20 or 21 in which said secondary component (II) is an extruded, relatively rigid, vinyl plastic member and comprises:

(M) a transverse, longitudinally extending continuous, flat, plate-like web;

(N) a pair of marginal, longitudinally extending, integral, elastic wings projecting from one face of said web (M), and extending towards one another but spaced apart;

(O) a pair of marginal, longitudinally extending ribs projecting upwardly from the opposite face of said web (M);

and (P) a median, longitudinally extending, parting strip of "T"-shaped cross-section projecting from the opposite face of said web (M), with the leg of said "T" extending from said web (M).

CLAIMS SUPPORTED BY THE SUPPLEMENTARY DISCLOSURE

23. The two-piece jamb of claim 11 wherein said wing member (III) comprises:

a pair of wings, each integrally associated with said web (m) along a longitudinally extending zone of said web (m) intermediate the longitudinally extending marginal side edges of said web (m), each said wing projecting outwardly from said web (m), and also extending laterally outwardly towards the marginal edges of said web (m).

24. The jamb of claim 23 wherein said wings extend along a longitudinally extending median zone of said web (m).

25. The two-piece jamb of claim 11 wherein said secondary component (II) is an extruded, relatively rigid, vinyl plastic member and comprises:

(M) a transverse, longitudinally extending continuous, flat, plate-like web;

(N) a pair of wings, each integrally associated with said web (M) along a longitudinally extending median zone of said web (M), each said wing projecting outwardly from said web (M) and also extending laterally outwardly towards the marginal edges of said web (M);

(O) a pair of marginal, longitudinally extending, ribs projecting upwardly from the opposite face of said web (M);

and (P) a median longitudinally extending parting strip of "T"-shaped cross-section projecting from the opposite face of said web (M), with the leg of said "T" extending from said web (M).

26. The two-piece jamb of claims 24 or 25 wherein said wings have a cross-sectional configuration satisfying the equation y = sin x from $-\frac{\pi}{2}$ to $\frac{3\pi}{2}$.

27. The storm door of claim 20 wherein said wing member (III) is on said secondary component (II) and comprises:

a pair of wings, each integrally associated with said web (m) along a longitudinally extending zone of said web (m) intermediate the longitudinally extending marginal side edges of said web (m), each said wing projecting outwardly from said web (m) and also extending laterally outwardly towards the marginal edges of said web (m).

28. The storm door of claim 27 wherein said wings extend along a longitudinally extending median zone of said web (m).

29. The storm door of claim 20 wherein said secondary component (II) is an extruded, relatively rigid, vinyl plastic member and comprises:

(M) a transverse, longitudinally extending continuous, flat, plate-like web;

(N) a pair of wings, each integrally associated with said web (M) along a longitudinally extending median zone of said web (M), each said wing projecting outwardly from said web (M) and also extending laterally outwardly towards the marginal edges of said web (M);

(O) a pair of marginal, longitudinally extending ribs projecting upwardly from the opposite face of said web (M);

(P) a median longitudinally extending parting strip of "T"-shaped cross-section projecting from the opposite face of said web (M), with the leg of said "T" extending from said web (M).

30. The storm door of claims 28 or 29 wherein said wings have a

cross-sectional configuration satisfying the equation $y = \sin x$ from $-\frac{\pi}{2}$ to $\frac{3\pi}{2}$.

*

FIG. 1.

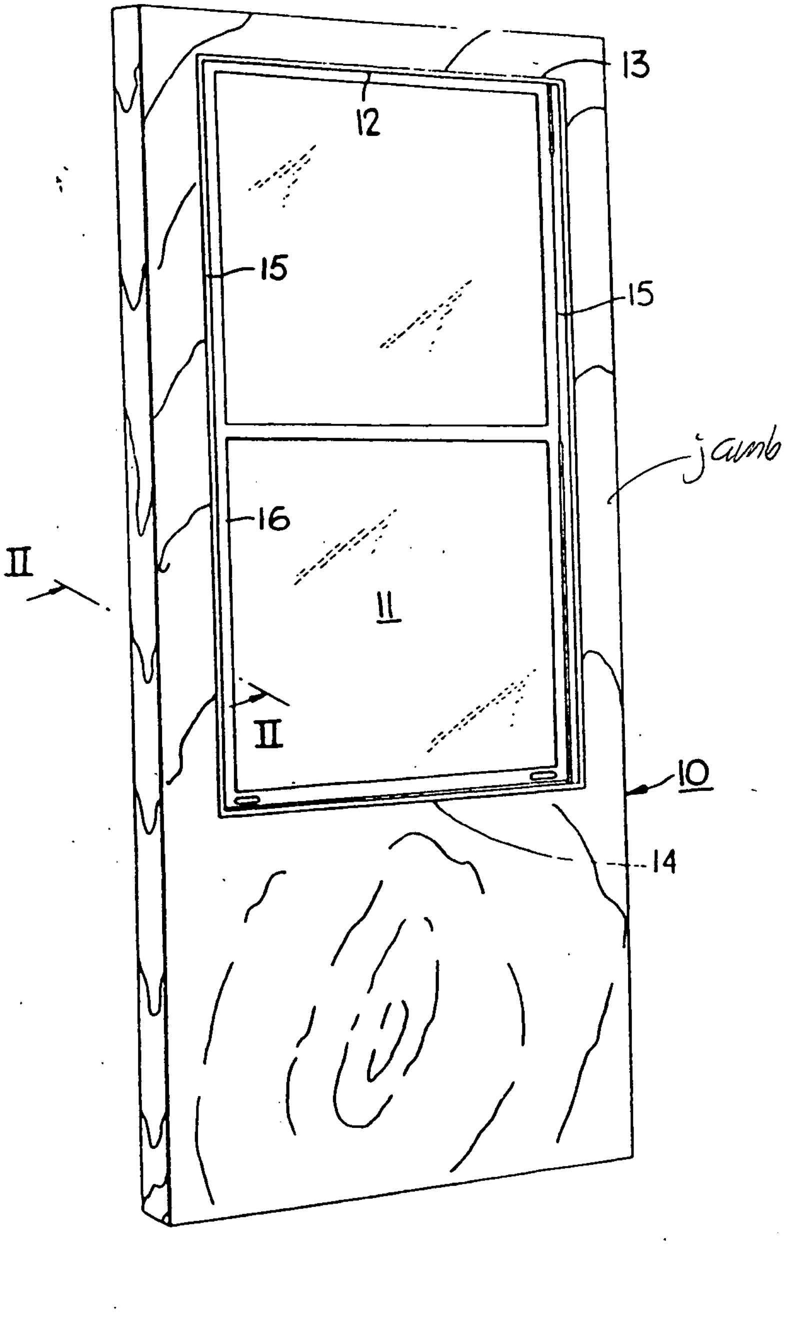

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FIG.2.

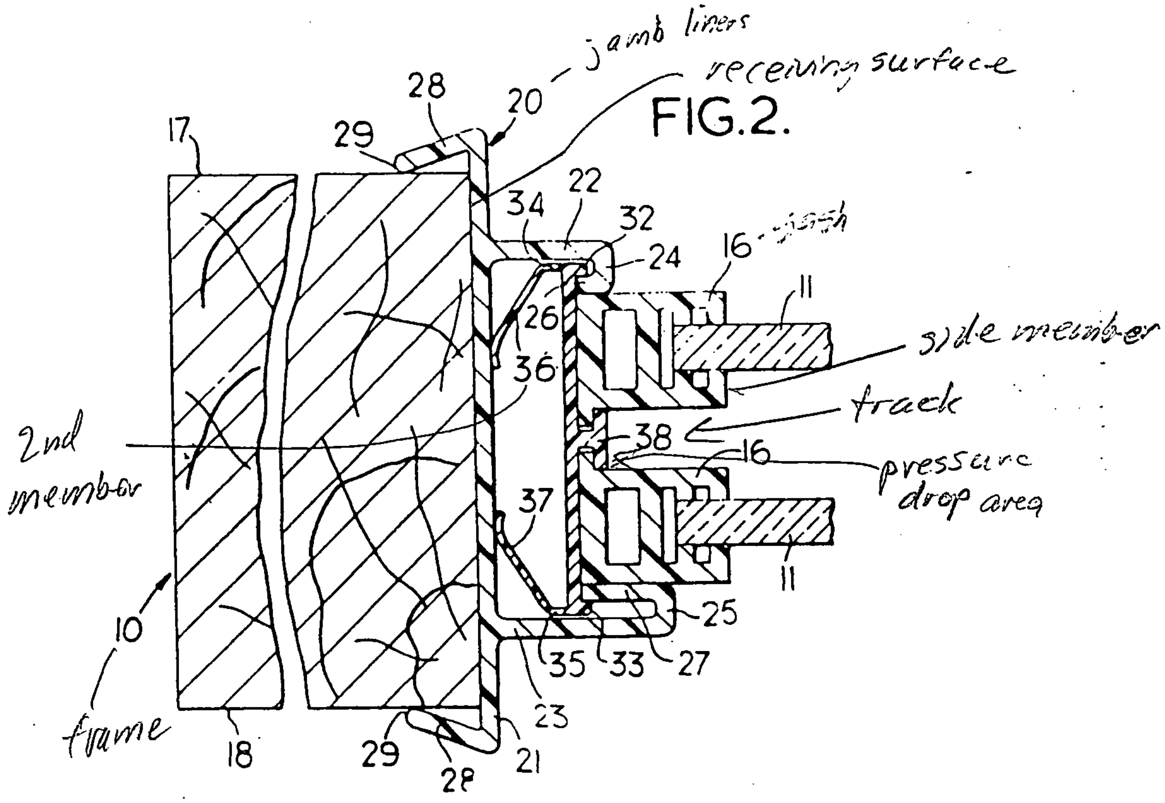

FIG.3.

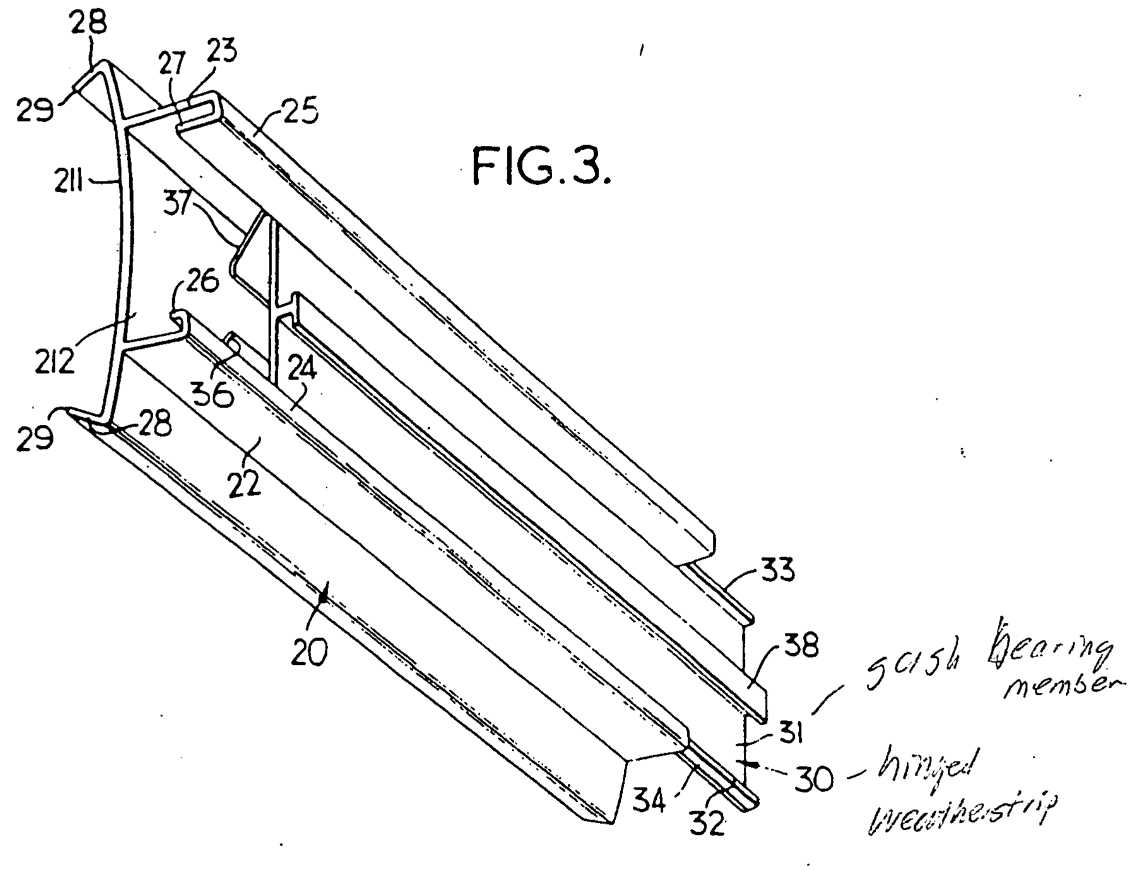

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FIG.4.

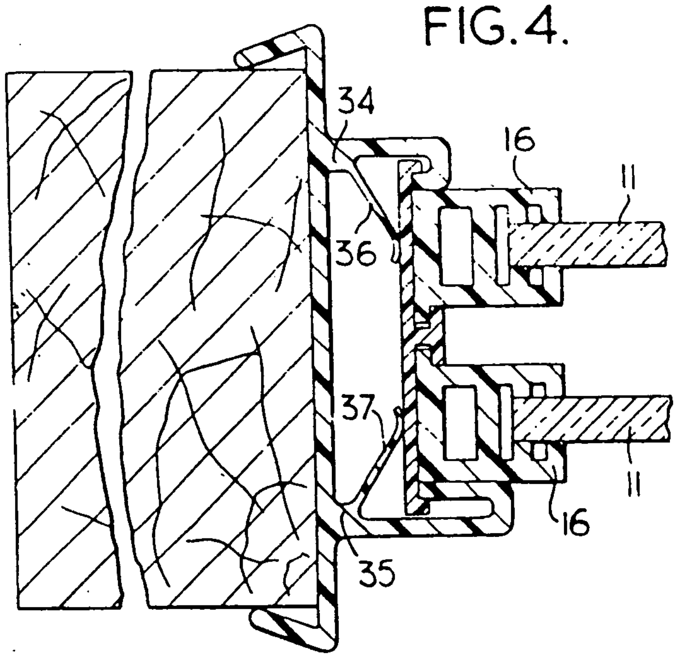
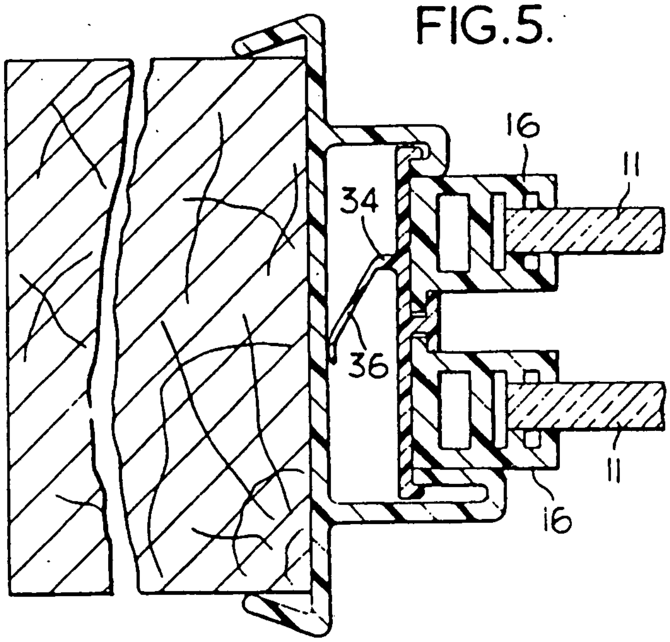


FIG.5.



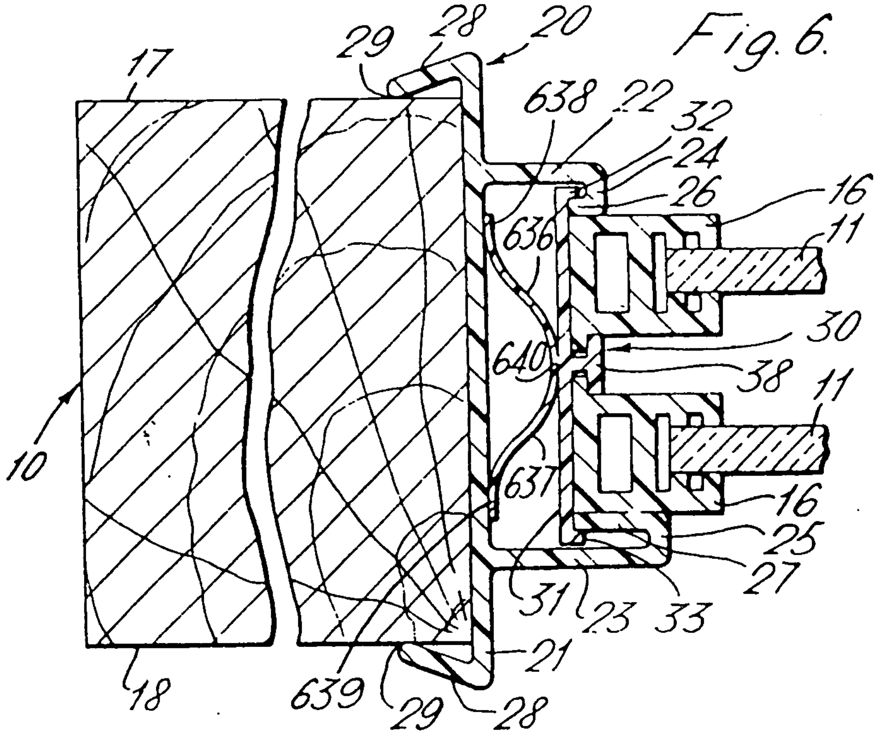


Fig. 6.

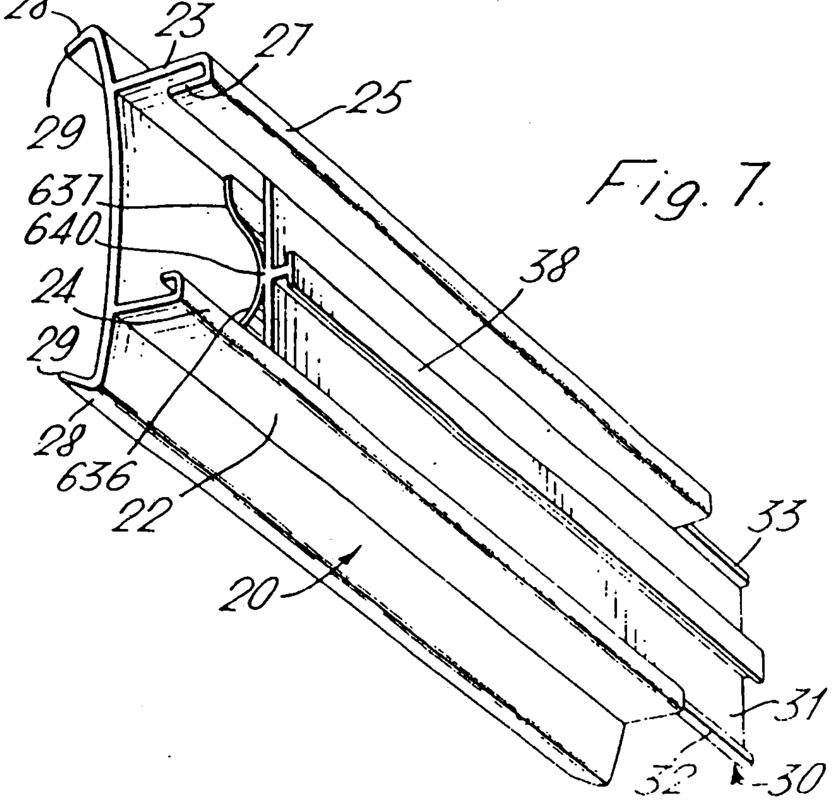


Fig. 7.

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